

IMAGE COMPRESSION USABLE WITH ANIMATED IMAGES

ABSTRACT OF THE DISCLOSURE

To compress an image, each pixel is considered. The color of each pixel, represented
5 as an index into a color palette, is compared with the color of the pixel's upper and left
neighbors and encoded to an entry in the color palette. A probability distribution is updated
based on the colors of the pixel and its left and upper neighbors. Once all pixels are encoded,
the color palette is optimized using the probability distribution, and the indices into the color
palette for the pixels are compressed. In the preferred embodiment, the compression is
10 achieved using a single pass over the pixels in the image, and the probability distribution is
updated dynamically as each pixel is compressed.

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